

Application Number 10/052,861
Amendment dated April 7, 2004
Reply to Office Action of November 7, 2003

REMARKS

Claims 1-5 and 11-14 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement, based on amendments made to the claims in the Amendment filed on August 27, 2003. The language of the claims has been amended to clarify that the temperature sensors generate temperature signals which are used by the controller in controlling the temperature of the temperature control fluid and the chuck. This configuration set forth in the claims is described in the specification and illustrated in the drawings as originally filed. It is believed that the amended claims are in compliance with 35 U.S.C. § 112, and reconsideration of the rejections of claims 1-5 and 11-14 under 35 U.S.C. § 112, first paragraph, is respectfully requested.

Claims 11-18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the combined teachings of EP 0411916 (EP '916) and Oswalt, et al. (U.S. 4,850,201). Claims 11-18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over EP '916 and Oswalt, et al. and further in view of Kawamura (U.S. Patent number 5,892,207). Claims 1-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over any of the prior art as applied to claims 11-18 above, and further in view of Marshall (U.S. Patent number 2,466,460). Claims 1-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over any of the prior art applied to claims 11-18 above, and further in view of Newton (U.S. Patent number 3,237,415). Claims 1-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over any of the prior art applied to claims 11-18 above, and further in view of Finnemore (U.S. Patent number 2,182,174). Claims 1-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over any of the prior art applied to claims 11-18 above, and further in view of Tryon (U.S. Patent number 2,917,287) or Padden (U.S. Patent number 4,071,078). In view of the amendments to the claims and the following remarks, the rejections are respectfully traversed, and reconsideration of the rejections is requested.

All of the claims have been amended to incorporate additional features of the invention. Specifically, the claims are amended to recite the feature of the invention in which the temperature control fluid of the invention is routed to separate portions of the chuck on separate

flow paths such that temperature in the separate portions of the chuck can be controlled. None of the cited art, taken alone or in any combination, teaches or suggests this feature of the invention now set forth in the amended claims.

In EP '916, a single flow path of constant temperature water connects a wafer table 5 to a circulator 13. The constant-temperature water enters a flow passageway 8 at an inlet port 11 and exits the flow passageway 8 through an outlet port 10. Hence, there is a single flow path for constant-temperature water, in contrast to the claimed invention, in which a plurality of flow paths are used to circulate a temperature control fluid to a plurality of portions of a wafer chuck.

In Oswald, et al., a pump 7 delivers chilled cooling water from a tank 5 to a load along a single circulation path. No plurality of paths connected to a plurality of input ports at a plurality of portions of a wafer chuck, as set forth in the amended claims, is taught or suggested in Oswald, et al.

Since neither EP '916, nor Oswald, et al. teaches or suggests the invention set forth in the amended claims, there is no combination of the references which would provide such teaching or suggestion. Neither EP '916 nor Oswald, et al., taken alone or in combination, teaches or suggests the invention set forth in the amended claims. Therefore, it is believed that the claims are allowable over EP '916 and Oswald, et al., and, therefore, reconsideration of the rejections of claims 11-18 under 35 U.S.C. § 103(a) based on EP '916 and Oswald, et al. is respectfully requested.

Kawamura also fails to teach or suggest a plurality of circulation paths connected via a respective plurality of ports to a respective plurality of portions of a wafer chuck, as set forth in the amended claims. Accordingly, there is no combination of Kawamura with EP '916 and Oswald, et al. which would result in teaching or suggesting the invention set forth in the amended claims. Therefore, it is believed that the amended claims are allowable over the references, and, therefore, reconsideration of the rejections of claims 11-18 under 35 U.S.C. § 103(a) based on EP '916, Oswald, et al. and Kawamura is respectfully requested.

Application Number 10/052,861
Amendment dated April 7, 2004
Reply to Office Action of November 7, 2003

Marshall, Newton, Finnemore, Tryon and Padden all teach bypass conduits.

Marshall also fails to teach or suggest the plurality of circulation paths connected via a respective plurality of ports to a respective plurality of portions of a wafer chuck, as set forth in the amended claims. Accordingly, there is no combination of Marshall with the other cited art that would result in teaching or suggesting the invention set forth in the amended claims. Therefore, it is believed that the amended claims are allowable over the references, and, therefore, reconsideration of the rejections of claims 1-10 under 35 U.S.C. § 103(a) based on the cited art combined with Marshall is respectfully requested.

Newton also fails to teach or suggest the plurality of circulation paths connected via a respective plurality of ports to a respective plurality of portions of a wafer chuck, as set forth in the amended claims. Accordingly, there is no combination of Newton with the other cited art that would result in teaching or suggesting the invention set forth in the amended claims. Therefore, it is believed that the amended claims are allowable over the references, and, therefore, reconsideration of the rejections of claims 1-10 under 35 U.S.C. § 103(a) based on the cited art combined with Newton is respectfully requested.

Finnemore also fails to teach or suggest the plurality of circulation paths connected via a respective plurality of ports to a respective plurality of portions of a wafer chuck, as set forth in the amended claims. Accordingly, there is no combination of Finnemore with the other cited art that would result in teaching or suggesting the invention set forth in the amended claims. Therefore, it is believed that the amended claims are allowable over the references, and, therefore, reconsideration of the rejections of claims 1-10 under 35 U.S.C. § 103(a) based on the cited art combined with Finnemore is respectfully requested.

Tryon also fails to teach or suggest the plurality of circulation paths connected via a respective plurality of ports to a respective plurality of portions of a wafer chuck, as set forth in the amended claims. Accordingly, there is no combination of Tryon with the other cited art that would result in teaching or suggesting the invention set forth in the amended claims. Therefore, it is believed that the amended claims are allowable over the references, and, therefore,

Application Number 10/052,861
Amendment dated April 7, 2004
Reply to Office Action of November 7, 2003

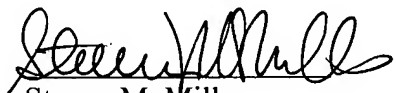
reconsideration of the rejections of claims 1-10 under 35 U.S.C. § 103(a) based on the cited art combined with Tryon is respectfully requested.

Padden also fails to teach or suggest the plurality of circulation paths connected via a respective plurality of ports to a respective plurality of portions of a wafer chuck, as set forth in the amended claims. Accordingly, there is no combination of Padden with the other cited art that would result in teaching or suggesting the invention set forth in the amended claims. Therefore, it is believed that the amended claims are allowable over the references, and, therefore, reconsideration of the rejections of claims 1-10 under 35 U.S.C. § 103(a) based on the cited art combined with Padden is respectfully requested.

In view of the amendments to the claims and the foregoing remarks, it is believed that, upon entry of this Amendment, all claims pending in the application will be in condition for allowance. Therefore, it is requested that this Amendment be entered and that the case be allowed and passed to issue. If a telephone conference will expedite prosecution of the application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

Date: April 7, 2004
Mills & Onello, LLP
Eleven Beacon Street, Suite 605
Boston, MA 02108
Telephone: (617) 994-4900
Facsimile: (617) 742-7774


Steven M. Mills
Registration Number 36,610
Attorney for Applicants

J:\TMP\0013CON\amendmentafterfinal1.wpd